

OIL ANALYSIS REPORT



Machine Id LA1 321 Component Natural Gas Engine Fluid PETRO CANADA SENTRON LA 2000 (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

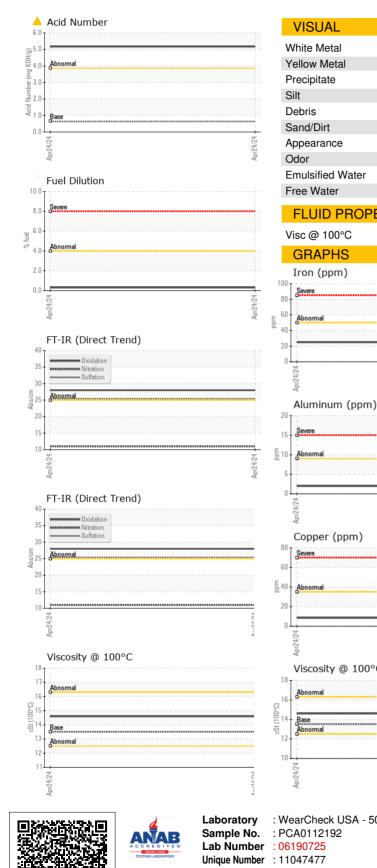
Fluid Condition

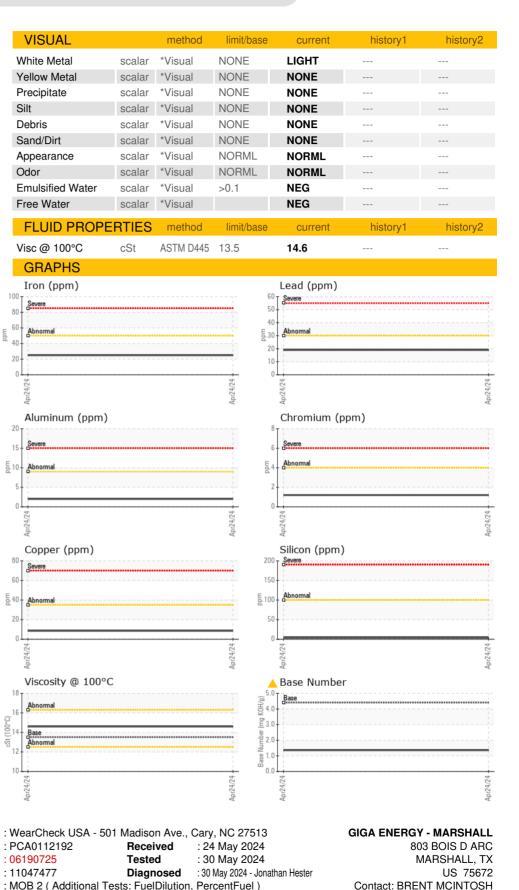
The AN level is above the recommended limit. The BN level is low. The oil is no longer serviceable.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0112192		
Sample Date		Client Info		24 Apr 2024		
Machine Age	hrs	Client Info		11759		
Oil Age	hrs	Client Info		2160		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	25		
Chromium	ppm	ASTM D5185m	>4	1		
Nickel	ppm	ASTM D5185m	>2	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	1		
Aluminum	ppm	ASTM D5185m	>9	2		
Lead	ppm	ASTM D5185m	>30	19		
Copper	ppm	ASTM D5185m	>35	9		
Tin	ppm	ASTM D5185m	>4	2		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0		
Barium	ppm	ASTM D5185m	1	<1		
Molybdenum	ppm	ASTM D5185m	1	2		
Molybdenum Manganese		ASTM D5185m ASTM D5185m	1 5	2 <1		
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1	2 <1 5		
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1 1237	2 <1 5 1420		
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1 1237 270	2 <1 5 1420 323	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1 1237 270 330	2 <1 5 1420 323 400	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1 1237 270 330 2670	2 <1 5 1420 323	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1 5 1 1237 270 330	2 <1 5 1420 323 400	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1 5 1 1237 270 330 2670	2 <1 5 1420 323 400 3508 current 4	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1 5 1 1237 270 330 2670 Iimit/base	2 <1 5 1420 323 400 3508 current	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1 1237 270 330 2670 2670 2670 2670 2670	2 <1 5 1420 323 400 3508 <u>current</u> 4 4 4	 history1 	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1 5 1 1237 270 330 2670 Limit/base >+100	2 <1 5 1420 323 400 3508 current 4 4	 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1 5 1 1237 270 330 2670 2670 2670 2670 2670	2 <1 5 1420 323 400 3508 <u>current</u> 4 4 4	 history1 	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	1 5 1 1237 270 330 2670 limit/base >+100 >20 >20 >4.0	2 <1 5 1420 323 400 3508 current 4 4 4 4 0.3	 history1 	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1 5 1 1237 270 330 2670 2670 2670 >+100 >+100 >20 >20 >4.0	2 <1 5 1420 323 400 3508 current 4 4 4 4 0.3 current	 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D3524	1 5 1 1237 270 330 2670 limit/base >+100 >20 >4.0 limit/base	2 <1 5 1420 323 400 3508 current 4 4 4 0.3 current 0.1	 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7624	1 5 1 1237 270 330 2670 limit/base >+100 >20 >4.0 limit/base	2 <1 5 1420 323 400 3508 current 4 4 4 4 0.3 current 0.1 11.0	 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7624	1 5 1 1237 270 330 2670 2670 2670 2670 2670 2670 2670 270 270 20 20 20 20 20 20 20 20 20 20	2 <1 5 1420 323 400 3508 current 4 4 4 4 0.3 current 0.1 0.1 11.0 25.4	 history1 history1 history1	 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7415	1 5 1 1237 270 330 2670 imit/base >+100 >20 >4.0 imit/base >20 >30 imit/base	2 <1 5 1420 323 400 3508 current 4 4 4 4 0.3 current 0.1 11.0 25.4 current	 history1 history1 history1	 history2 history2 history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5244 *ASTM D7624 *ASTM D7624 *ASTM D7414	1 5 1 1237 270 330 2670 imit/base >+100 >+100 >20 >4.0 imit/base >20 >30 imit/base >30	2 <1 5 1420 323 400 3508 current 4 4 4 0.3 current 0.1 11.0 25.4 current 28.0	 history1 history1 history1 	 history2 history2 history2 history2 history2



OIL ANALYSIS REPORT





 Certificate L2367
 Test Package
 : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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